

U.S. Department of Energy
Washington, D.C.

PAGE CHANGE

DOE O 440.1 Chg 2

10-21-96

**SUBJECT: WORKER PROTECTION MANAGEMENT FOR DOE FEDERAL AND
CONTRACTOR EMPLOYEES**

1. **PURPOSE.** To transmit revised pages to DOE O 440.1, WORKER PROTECTION FOR DOE FEDERAL AND CONTRACTOR EMPLOYEES, dated 9-30-95.
2. **EXPLANATION OF CHANGES.** To improve the Department's requirements for the control of suspect/counterfeit items. This change satisfies a commitment to the Under Secretary developed by the Senior Managers Task Group on Counterfeit/Suspect Items.
3. **FILING INSTRUCTIONS.**

a.	<u>Remove Pages</u>	<u>Dated</u>	<u>Insert Pages</u>	<u>Dated</u>
	3	9-30-95	3	9-30-95
	4	9-30-95	4	10-21-96
			4a (and 4b)	10-21-96
			Atch 1, pg 7	10-21-96
			Atch 1, pg 8	10-21-96
	Atch 2, pg 1	9-30-95	Atch 2, pg 1	9-30-95
	Atch 2, pg 2	9-30-95	Atch 2, pg 2	10-21-96
			Atch 2, pg 2a	
			and pg 2b	10-21-96
	Atch 2, pg 3	9-30-95	Atch 2, pg 3	10-21-96
	Atch 2, pg 4	9-30-95	Atch 2, pg 4	9-30-95

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- b. After filing the attached pages, this transmittal may be discarded.

BY ORDER OF THE SECRETARY OF ENERGY:



ARCHER L. DURHAM
Assistant Secretary for
Human Resources and Administration

DISTRIBUTION:


All Departmental Elements

INITIATED BY:

Office of Environment, Safety and Health

- (1) accompany DOE worker protection personnel during workplace inspections;
 - (2) participate in activities provided for in this Order on official time;
 - (3) express concerns related to worker protection;
 - (4) decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm to that individual, coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures established in accordance with this Order;
 - (5) have access to DOE worker protection publications, DOE-prescribed standards, and the organization's own worker protection standards or procedures applicable to the workplace;
 - (6) observe monitoring or measuring of hazardous agents and have access to the results of exposure monitoring;
 - (7) be notified when monitoring results indicate they were overexposed to hazardous materials; and
 - (8) receive results of inspections and accident investigations upon request.
- g. Implement procedures to allow workers, through their supervisors, to stop work when they discover employee exposures to imminent danger conditions or other serious hazards. The procedure shall ensure that any stop work authority is exercised in a justifiable and responsible manner.
- h. Inform workers of their rights and responsibilities by appropriate means, including posting the appropriate DOE Worker Protection Poster in the workplace where it is accessible to all workers.
- i. Identify existing and potential workplace hazards and evaluate the risk of associated worker injury or illness.
- (1) Analyze or review:
 - (a) designs for new facilities and modifications to existing facilities and equipment;
 - (b) operations and procedures; and
 - (c) equipment, product, and service needs.

- (2) Assess worker exposure to chemical, physical, biological, or ergonomic hazards through appropriate workplace monitoring (including personal, area, wipe, and bulk sampling), biological monitoring, and observation. Monitoring results shall be recorded. Documentation shall describe the tasks and locations where monitoring occurred, identify workers monitored or represented by the monitoring, and identify the sampling methods and durations, control measures in place during monitoring (including the use of personal protective equipment), and any other factors that may have affected sampling results.
- (3) Evaluate workplaces and activities accomplished routinely by workers, supervisors, and managers and periodically by qualified worker protection professionals.
- (4) Report and investigate accidents, injuries, and illnesses (reference DOE O 231.1, ENVIRONMENT, SAFETY AND HEALTH REPORTING; DOE O 232.1, OCCURENCE REPORTING AND PROCESSING OF OPERATIONS INFORMATION; and DOE O 225.1, ACCIDENT INVESTIGATIONS) and analyze related data for trends and lessons learned (reference DOE O 210.1, PERFORMANCE INDICATORS PROGRAM AND ANALYSIS OF OPERATIONS).
- (5) Implement suspect/counterfeit item (S/CI) controls that accomplish the following objectives:
 - (a) Ensure that items in safety systems comply with design and procurement documents (safety systems are those systems, components, or structures whose failure could adversely affect the environment, safety, or health of the public or the health or safety of workers).
 - (b) Maintain current, accurate information on suspect/counterfeit items and associated suppliers using all available sources within government and industry. Disseminate relevant information on suspect/counterfeit items to field organizations and contractors as appropriate;
 - (c) Identification and disposition of S/CIs located in safety

-  systems and applications that create potential hazards;
- (d) Report discoveries and disseminate information about S/CIs;
 - (e) Train and inform managers, supervisors, and workers of S/CIs controls, including prevention, detection and disposition of S/CIs.
- j. Implement a hazard prevention/abatement process to ensure that all identified hazards are managed through final abatement or control.
 - (1) For hazards identified either in the facility design or during the development of procedures, controls are incorporated in the appropriate facility design or procedure.
 - (2) For existing hazards identified in the workplace, abatement actions prioritized according to risk to the worker are promptly implemented, interim protective measures are implemented pending

8. Implement S/CI controls as part of DOE's quality assurance program to the extent commensurate with the risks posed by the facility and its work and which contributes to a hazard-free workplace for workers.
- a. Management systems shall include:
- (1) Assurance that items meet the requirements for their intended use;
 - (2) Mechanisms to continually update information on S/CIs and associated suppliers;
 - (3) Procurement controls that preclude the introduction and use of S/CIs; no S/CIs shall be used or introduced intentionally unless found acceptable through the disposition process;
 - (4) Identification and disposition of S/CIs in safety systems and applications that create potential hazards;
 - (5) Communicating and sharing of S/CI information;
 - (6) Training and informing managers, supervisors, and workers of S/CI controls, including prevention, detection and disposition of S/CIs;
 - (7) Assurance that the standards and methods used in determining the acceptability of items is based on consensus standards and/or commonly accepted industry practices, unless inconsistent with applicable law or otherwise impractical; and
 - (8) Aggressive pursuit of legal remedies, civil and criminal, to protect DOE resources, employees, and mission.

- b. S/CI controls shall include:
- (1) Engineering involvement in the procurement process, particularly in development of specifications during inspection and testing, and when replacing, maintaining or modifying equipment.
 - (2) Implementation of procurement procedures that preclude the introduction of S/CIs by:
 - (a) Identifying technical and quality assurance requirements in procurement specifications;
 - (b) Only accepting items that comply with the procurement specifications; and
 - (c) Removing and destroying S/CIs from inventory and storage areas.
 - (3) Development and implementation of procedures for inspection, identification, evaluation, and disposition of S/CIs installed in safety systems. Engineering evaluations of S/CIs installed in safety systems or in applications that create potential hazards shall consider potential risks to the public and worker, cost/benefit considerations, and include a schedule for replacement, if replacement is required.
 - (4) Routine maintenance cycles and/or inspection activities for non-safety systems shall include provisions for the identification of S/CIs. S/CIs identified during these activities shall be reported, evaluated, and dispositioned.
 - (5) Prior to destroying of S/CIs, the IG shall be consulted to determine whether there is need to retain them in the event of litigation.
 - (6) Testing of procured or in place S/CIs as necessary. Testing methods shall be approved by engineering personnel.
 - (7) Reporting S/CIs to the responsible program office and the IG shall be in accordance with DOE O 231.1, DOE O 232.1 and DOE 2030.4B.
 - (8) Conducting trend analysis and issue lessons learned for use in improving all S/CIs activities.
 - (9) Collect and disseminate to other Federal agencies and private industry information of S/CIs.

CONTRACTOR REQUIREMENTS DOCUMENT

WORKER PROTECTION MANAGEMENT FOR DOE CONTRACTOR EMPLOYEES

The contractor shall comply with the requirements contained herein.

1. Implement a written worker protection program that:
 - a. provides a place of employment free from recognized hazards that are causing or are likely to cause death or serious physical harm to employees; and
 - b. integrates all requirements contained in this attachment and other related site-specific worker protection activities.
2. Establish written policy, goals, and objectives for the worker protection program.
3. Use qualified worker protection staff to direct and manage the worker protection program.
4. Assign worker protection responsibilities, evaluate personnel performance, and hold personnel accountable for worker protection performance.
5. Encourage employee involvement in the development of program goals, objectives, and performance measures and in the identification and control of hazards in the workplace.
6. Provide workers the right, without reprisal, to:
 - a. accompany DOE worker protection personnel during workplace inspections;
 - b. participate in activities provided for herein on official time;
 - c. express concerns related to worker protection;
 - d. decline to perform an assigned task because of a reasonable belief that, under the circumstances, the task poses an imminent risk of death or serious bodily harm to that individual, coupled with a reasonable belief that there is insufficient time to seek effective redress through the normal hazard reporting and abatement procedures established in accordance with the requirements herein;
 - e. have access to DOE worker protection publications, DOE-prescribed standards, and the organization's own worker protection standards or procedures applicable to the workplace;
 - f. observe monitoring or measuring of hazardous agents and have access to the results of exposure monitoring;
 - g. be notified when monitoring results indicate they were overexposed to hazardous materials; and

- h. receive results of inspections and accident investigations upon request.
- 7. Implement procedures to allow workers, through their supervisors, to stop work when they discover employee exposures to imminent danger conditions or other serious hazards. The procedure shall ensure that any stop work authority is exercised in a justifiable and responsible manner.
- 8. Inform workers of their rights and responsibilities by appropriate means, including posting the appropriate DOE Worker Protection Poster in the workplace where it is accessible to all workers.
- 9. Identify existing and potential workplace hazards and evaluate the risk of associated worker injury or illness.
 - a. Analyze or review:
 - (1) designs for new facilities and modifications to existing facilities and equipment;
 - (2) operations and procedures; and
 - (3) equipment, product, and service needs.
 - b. Assess worker exposure to chemical, physical, biological, or ergonomic hazards through appropriate workplace monitoring (including personal, area, wipe, and bulk sampling); biological monitoring; and observation. Monitoring results shall be recorded. Documentation shall describe the tasks and locations where monitoring occurred, identify workers monitored or represented by the monitoring, and identify the sampling methods and durations, control measures in place during monitoring (including the use of personal protective equipment), and any other factors that may have affected sampling results.
 - c. Evaluate workplaces and activities (accomplished routinely by workers, supervisors, and managers and periodically by qualified worker protection professionals).
 - d. Report and investigate accidents, injuries, and illnesses, and analyze related data for trends and lessons learned (reference DOE O 210.1).



- e. Implement S/CI controls as part of the contractor's quality assurance program to the extent commensurate with the risks posed by the facility and its work and which contribute to a hazard-free workplace.

(1) Management systems shall include:

- (a) Assurance that all items meet the requirements for their intended use;
- (b) Mechanisms to continually update information on S/CIs and associated suppliers;
- (c) Control of the introduction and use of S/CIs through design, procurement, and inspection/maintenance. No S/CI shall be used or introduced intentionally unless found acceptable through the disposition process.
- (d) Identification and disposition of S/CIs in safety systems and applications that create potential hazards;
- (e) Communicating and sharing of S/CIs information;
- (f) Training and informing managers, supervisors, and workers of S/CI controls, including prevention, detection and disposition of S/CIs; and
- (g) Assurance that the standards and methods used in determining the acceptability of items is based on consensus standards and/or commonly accepted industry practices, unless inconsistent with applicable law or otherwise impractical.

- (2) S/CI controls shall include:
 - (a) Engineering involvement in the procurement process, particularly in development of specifications during inspection and testing, and when replacing, maintaining or modifying equipment.
 - (b) Implementation of procurement procedures that preclude the introduction of S/CIs by:
 - 1 Identifying technical and quality assurance requirements in procurement specifications;
 - 2 Only accepting items that comply with the procurement specifications; and
 - 3 Removing and destroying S/CIs from all inventory storage areas.
- (3) Development and implementation of procedures for inspection, identification, evaluation, and disposition of S/CIs installed in safety systems. Engineering evaluations of S/CIs installed in safety systems or in applications that create potential hazards shall consider potential risks to the public and worker, cost/benefit considerations, and include a schedule for replacement, if replacement is required.
- (4) Routine maintenance cycles and/or inspection activities for non-safety systems shall include provisions for the identification of S/CIs. S/CIs identified during these activities shall be reported, evaluated, and dispositioned.
- (5) Prior to destroying of S/CIs, the IG shall be consulted to determine whether there is need to retain them in the event of litigation.
- (6) Testing of procured or in place S/CIs as necessary. Testing methods shall be approved by engineering personnel.
- (7) Reporting S/CIs to the responsible program office and the IG shall be in accordance with DOE O 231.1, DOE O 232.1, and DOE 2030.4B.
- (8) Conduct trend analysis and issue lessons learned for use in improving all S/CIs activities.

10. Implement a hazard prevention/abatement process to ensure that all identified hazards are managed through final abatement or control.
 - a. For hazards identified either in the facility design or during the development of procedures, controls are incorporated in the appropriate facility design or procedure.
 - b. For existing hazards identified in the workplace, abatement actions prioritized according to risk to the worker are promptly implemented, interim protective measures are implemented pending final abatement, and workers are protected immediately from imminent danger conditions.
 - c. Hazards are addressed when selecting or purchasing equipment, products, and services.
 - d. Hazard control methods are selected based on the following hierarchy.
 - (1) Engineering controls.
 - (2) Work practices and administrative controls that limit worker exposures
 - (3) Personal protective equipment.
11. Provide workers, supervisors, managers, visitors, and worker protection professionals with worker protection training.
12. Comply with the following worker protection requirements.
 - a. Title 29 of the Code of Federal Regulations (CFR), Part 1910, "Occupational Safety and Health Standards."
 - b. Title 29 CFR, Part 1915, "Shipyard Employment."
 - c. Title 29 CFR, Part 1917, "Marine Terminals."
 - d. Title 29 CFR, Part 1918, "Safety and Health Regulations for Longshoring."
 - e. Title 29 CFR, Part 1926, "Safety and Health Regulations for Construction."
 - f. Title 29 CFR, Part 1928, "Occupational Safety and Health Standards for Agriculture."

- g. American Conference of Governmental Industrial Hygienists (ACGIH), "Threshold Limit Values for Chemical Substances and Physical Agents and Biological Exposure Indices" (most recent edition, as specified in the contract), when ACGIH Threshold Limit Values (TLVs) are lower (more protective) than Occupational Safety and Health Administration (OSHA) Permissible Exposure Limits. [When ACGIH TLVs are used as exposure limits, DOE operations shall nonetheless comply with the other provisions of any applicable OSHA-expanded health standard.] The TLVs for exposures to laser emissions in the ACGIH Indices are excluded from this requirement.
- h. American National Standards Institute Z136.1, *Safe Use of Lasers*. [Only the exposure limits and technical requirements apply. Programmatic components of American National Standards Institute Z136.1 do not apply.]
- i. American National Standards Institute Z88.2, *Practices for Respiratory Protection*.

Requirements for specific functional areas are contained in paragraphs 13 through 20 and only apply if the contract is involved in these activities.

13. CONSTRUCTION SAFETY.

- a. The following requirements and responsibilities apply for construction projects above the monetary threshold established by the Davis-Bacon Act (40 U.S.C. 276a) at Government-owned or -leased facilities where the contract clause "Safety and Health (Government-Owned or -Leased Facility)" applies.
 - (1) Hazard Analyses. For each construction operation presenting hazards not experienced in previous project operations or for work performed by a different subcontractor, the construction contractor shall prepare a hazard analysis and have it approved prior to commencement of affected work. These analyses shall identify foreseeable hazards and planned protective measures, provide drawings and/or other documentation of protective measures that a Professional Engineer or other competent person is required to prepare, and define the qualifications of competent persons required for workplace inspections.
 - (2) Worker Hazard Awareness. Workers shall be informed of foreseeable hazards and the required protective measures described within the approved hazard analysis prior to commencement of work on the affected construction operation.
 - (3) Workplace Inspections and Hazard Abatement. During periods of active construction, the construction contractor shall have a designated representative on site at all times. This individual shall conduct and document daily inspections of the workplace to identify and correct hazards and instances of noncompliance with project safety and health requirements. If immediate corrective